

ABSTRACT

The technique of the invention sets an upper limit torque T_{lmax} and a lower limit torque T_{lmin} output from a motor generator, based on input and output restrictions W_{in} and W_{out} of a battery, a motor electric power demand P_{m2} , an auxiliary machinery electric power demand P_{csm} , and a potential loss P_{loss} (step S150). The technique then restricts a target revolution speed N_e^* of an engine to make an output torque of the motor generator within a range of the lower limit torque T_{lmin} to the upper limit torque T_{lmax} (steps S180 to S200). This arrangement ensures output of a torque in response to a driver's requirement, while effectively preventing the battery from being charged or discharged excessively.